

Title (en)  
USE MODELS FOR A CURRENT GENERATION ARCHITECTURE FOR AN IMPLANTABLE MEDICAL DEVICE

Title (de)  
NUTZUNGSMODELLE FÜR EINE STROMERZEUGUNGSARCHITEKTUR FÜR EINE IMPLANTIERBARE MEDIZINISCHE VORRICHTUNG

Title (fr)  
MODÈLES D'UTILISATION POUR UNE ARCHITECTURE DE PRODUCTION DE COURANT POUR UN DISPOSITIF MÉDICAL IMPLANTABLE

Publication  
**EP 3478358 A1 20190508 (EN)**

Application  
**EP 17768597 A 20170906**

Priority

- US 201662393004 P 20160910
- US 201715695973 A 20170905
- US 2017050293 W 20170906

Abstract (en)  
[origin: US2018071521A1] Current generation circuitry for an Implantable Pulse Generator (IPG) is disclosed. The IPG comprises a plurality of PDACs and NDACs for sourcing currents to electrode nodes. The PDACs and NDACs can be configured as pairs to each provide stimulation in independent timing channels, or the PDACs can be combined and the NDACs can be combined to provide stimulation in a single timing channel. Further, the PDAC or NDAC can provide a plurality of source branch currents each of the same amplitude to the electrodes via a switch matrix, and pulse definition circuitry can be configured to always connect each of the source branch currents to one of the first one or more electrode nodes via the switch matrix.

IPC 8 full level  
**A61N 1/02** (2006.01); **A61N 1/36** (2006.01); **H03K 3/78** (2006.01); **H03K 5/131** (2014.01); **H03K 5/15** (2006.01)

CPC (source: EP US)  
**A61N 1/025** (2013.01 - EP US); **A61N 1/0551** (2013.01 - US); **A61N 1/36071** (2013.01 - US); **A61N 1/36125** (2013.01 - EP US); **A61N 1/36185** (2013.01 - US); **A61N 1/3787** (2013.01 - US); **H03K 3/78** (2013.01 - EP US); **H03K 5/131** (2013.01 - EP US); **H03K 5/1502** (2013.01 - EP US); **A61N 1/36062** (2017.07 - EP US)

Citation (search report)  
See references of WO 2018048912A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**US 10549091 B2 20200204**; **US 2018071521 A1 20180315**; AU 2017324433 A1 20190207; AU 2017324433 B2 20200227; CA 3032604 A1 20180315; CA 3032604 C 20210720; EP 3478358 A1 20190508; EP 3478358 B1 20210414; WO 2018048912 A1 20180315

DOCDB simple family (application)  
**US 201715695973 A 20170905**; AU 2017324433 A 20170906; CA 3032604 A 20170906; EP 17768597 A 20170906; US 2017050293 W 20170906